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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO.       |
|---|-------------|----------------------|--------------------------|------------------------|
| 10/760,584  | 01/21/2004  | Koji Aoki            | 118413                   | 1128                   |
| 25944   | 7590        | 06/06/2007           |                          |                        |
| OLIFF & BERRIDGE, PLC<br>P.O. BOX 19928<br>ALEXANDRIA, VA 22320 |             |                      | EXAMINER<br>DINH, TUAN T |                        |
|   |             |                      | ART UNIT<br>2841         | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>06/06/2007  | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/760,584

Applicant(s)

AOKI, KOJI

Examiner

Tuan T. Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 1, 4, 5, 8, 9, 12, 13 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2, 3, 6, 7, 10, 11, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 33 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-3, 6-7, 10-11, 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murade et al. in view of Suzuki et al. (both references cited in the record).

As to claim 2, Murade et al. discloses a wiring board as shown in figures 1-10 comprising:

a substrate (10);  
an interconnect layer (3a, 3b) formed of a plurality of layers (see figure 3), the interconnect layer being formed over the substrate (10); and  
a plurality of electrodes (9) formed to overlap the interconnect layer (3); wherein  
a part of first and second interconnecting patterns (3a, 3b) are disposed to extend in directions forming a lattice under each of the electrodes, the first interconnecting pattern being positioned in a first layer among the plurality of layers forming the interconnect layer, the second interconnecting pattern being positioned in a second layer among the plurality of layers forming the interconnect layer.

Murade et al. does not specific disclose the plurality of layers being formed one over another at different levels in a thickness direction of the substrate.

Suzaki et al. shows an EL display apparatus as shown in figure 6 comprising a substrate (10) having a plurality of layers (41, 52) being formed one over another at different levels in a thickness direction of the substrate (10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the plurality of layers being formed one over another at different levels in a thickness direction of the substrate as taught by Suzuki et al. employed in the wiring board of Murade et al. in order to increase the area of the emitting light region for the display apparatus.

As to claim 3, Murade et al. discloses a wiring board as shown in figures 1-10 comprising: a substrate (10); an interconnect layer (3a, 3b) formed of a plurality of layers (see figure 3), the interconnect layer being formed over the substrate (10); and a plurality of electrodes (9) formed to overlap the interconnect layer; wherein first and second interconnecting patterns (3a, 3b) positioned respectively in first and second layers among the plurality of layers forming the interconnect layer have portions extending parallel to each other under each of the electrodes, and the parallel extending portions are formed not to overlap each other (see figure 10).

Murade et al. does not specific disclose the plurality of layers being formed one over another at different levels in a thickness direction of the substrate.

Suzaki et al. shows an EL display apparatus as shown in figure 6 comprising a substrate (10) having a plurality of layers (41, 52) being formed one over another at different levels in a thickness direction of the substrate (10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the plurality of layers being formed one over another at different levels in a thickness direction of the substrate as taught by Suzuki et al. employed in the wiring board of Murade et al. in order to increase the area of the emitting light region for the display apparatus.

As to claims 6-7, Murade et al. further comprising: an organic resin layer (7) formed to cover the interconnect layer (3), and having an upper surface made flat, wherein the electrodes (9) are formed over the organic resin layer (7) and are electrically connected to at least one of plurality of layers forming the interconnect layers by passing through the organic resin layer.

As to claims 10-11, and 14-15, Murade et al. discloses an electronic instrument comprising an electro-optical device and a functional layer (30), the functional layer being formed in a first region of each of the electrodes; wherein each of the electrodes and one of the plurality of layers forming the interconnect layer supplying power to the electrode are connected in a second region of the electrode.

***Allowable Subject Matter***

3. Claims 33-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter: Neither the references cited nor the cited references teach or suggest in combination of the wiring board having each of the first and second interconnecting patterns has at least three interconnecting lines disposed parallel to each other.

***Response to Arguments***

5. Applicant's arguments with respect to claims 2-3, 6-7, 10-11, 14-15, and 33-34 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reichard Dean can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Dinh  
May 22, 2007.



TUAN T. DINH  
PRIMARY EXAMINER